

## **ABSTRACT OF DISCLOSURE**

An optical transmission line is partitioned into a plurality of spans by a plurality of optical amplification repeaters. A transmission span is provided with a plurality of dispersion compensation elements for compensating for wavelength dispersion caused by the transmission line fiber. The dispersion compensation elements substantially do not increase the length of the span in which they are located. One of the pluralities of dispersion compensation elements is arranged in the optical amplification repeater.